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IMPACT OF PUBLIC REPORTING AND 'OUTLIER' STATUS IDENTIFICATION ON PERCUTANEOUS CORONARY INTERVENTION CASE SELECTION IN MASSACHUSETTS

ACC Moderated Poster Contributions
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Authors: *James M. McCabe, Frederic Resnic, Brigham and Women's Hospital, Boston, MA, USA*

Background: Massachusetts introduced public reporting of percutaneous coronary intervention (PCI) outcomes in 2003. Four 'outlier' hospitals have since been publically identified based on discrepancies between annual predicted and observed in-hospital mortality rates following PCI. There is concern that public labeling of 'outlier' status may lead to operator risk-avoidance at those institutions thereby limiting access to appropriate care for some of their sickest patients.

Methods: Publicly available predicted mortality risk rates for all PCI-capable Massachusetts hospitals from 2003-2009 were collated. Shock and ST-segment myocardial infarction (STEMI) cases were reported separately from not-shock or STEMI cases consistent with state data. Prevalence-weighted expected mortality rates of all PCI cases per hospital were calculated. Analyses were performed with generalized estimating equations to account for nested and repeated measures.

Results: The prevalence-weighted mean expected mortality for all 129,676 PCI cases during the study period was 1.39 ± 0.34% (5.3 ± 2.1% for all shock and STEMI patients, 0.61 ± 0.18% for all not-shock, not-STEMI patients). Adjusting for temporal trends, there was a mean 0.21% reduction in expected mortality risk among all PCI patients at 'outlier' hospitals following public identification, but this finding did not achieve statistical significance (p = 0.058, 95%CI -0.43 to 0.01). Irrespective of 'outlier' status, there was a 0.08% per year reduction in the predicted risk of all PCI patients in Massachusetts since the onset of public reporting (p = 0.001, 95%CI -0.13 to - 0.03).

Conclusions: Using averaged expected mortality rates at each hospital as a surrogate for the illness-severity of its PCI population, we found a trend towards generally less ill PCI patients at 'outlier' institutions following public identification. These data suggest that risk-aversive behaviors among PCI operators at 'outlier' institutions may be an unintended consequence of public reporting. There was also a significant temporal trend towards PCI in lower-risk patients across all hospitals in Massachusetts since the inception of public reporting of PCI outcomes.